

METHOD FOR CONTROLLING VOIDING AND BRIDGING IN SILICIDE FORMATION

Abstract

A method for forming a metal silicide contact for a semiconductor device includes forming a refractory metal layer over a substrate, including active and non-active area of said substrate, and forming a cap layer over the refractory metal layer. A counter tensile layer is formed over the cap layer, wherein the counter tensile layer is selected from a material such that an opposing directional stress is created between the counter tensile layer and the cap layer, with respect to a directional stress created between the refractory metal layer and the cap layer.